before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of		
Improving Public Safety Communications in the 800 MHz Band	)	WT Docket No. 02-55
Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels	)	

To: The Commission

COMMENTS OF
PREFERRED COMMUNICATION SYSTEMS, INC.
ON CONSENSUS PLAN

Preferred Communication Systems, Inc. ("Preferred"), pursuant to Public Notice, *Wireless Telecommunications Bureau Seeks Comment on "Consensus Plan" Filed in the 800 MHz Public Safety Interference Proceeding*, DA 02-2202, released September 6, 2002 ("*Request Notice*"), and Public Notice, *Wireless Telecommunications Bureau Clarifies Scope of Comments Sought in the 800 MHz Public Safety Proceeding (WT Docket 02-55)*, DA 02-2306, released September 17, 2002, hereby submits its Comments on the Consensus Plan and others.

I. Introduction

Preferred appreciates and supports the efforts of all of the parties in this proceeding who are seeking to minimize interference with public safety and other 800 MHz Band users' systems that are vital to our country's safety and protection. Preferred also appreciates the efforts of the Industrial Telecommunications Association ("ITA"), American Mobile Telecommunications Association ("AMTA") and the some of the major Public Safety organizations in seeking to craft a compromise that would meet all of the objectives set forth by the Commission in the *Notice of*

Proposed Rulemaking: "we solicit proposals on how best to remedy interference to 800 MHz Public Safety systems consistent with minimum disruption to our existing licensing structure and assurance of sufficient spectrum for critical public safety communications."[1]

After carefully reviewing the comments and reply comments filed so far in this proceeding and with respect to the so-called "Consensus" Proposal,[2] Preferred has concluded that said Proposal is fatally flawed due to its attempt to reverse the outcome of the General Category Auction ("FCC Auction #34") by limiting the allocation of Cellularized Service spectrum to Nextel and thereby creating a virtual monopoly in favor of Nextel. Such attempt clearly contravenes the FCC's *NPRM* directive by disrupting, if not obliterating, the Commission's license structure developed in 1995 to provide parties interested in providing cellularized service in 806-821/851-866 MHz Band the opportunity to bid for and win Geographic market area licenses pursuant to an auction procedure, and then construct and operate wide-area cellularized service systems, subject to certain protections afforded the incumbent site-specific licenses.[3]

Adoption of the Re-Banding Plan set forth in the so-called Consensus Proposal would disrupt the operations of SMR, Business and Industrial Land Transportation and Public Safety

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[1] In the Matter of Improving Public Safety Communications in the 800 MHz Band: Consolidating the 900 MHz I/LT and Business Pool Channels, WT Docket No. 02-55, *Notice of Proposed Rulemaking*, 17 FCC Rcd 4873 at paragraph 2 (2002) ("NPRM").

[2] Contrary to Nextel Communications, Inc.'s public pronouncements that the Consensus Proposal represents the public safety interference solution proposed by the holders of eighty percent (80%) of the "impacted licenses", the so-called "consensus" does not reflect the views of numerous SMR, Business and Industrial Land Transportation and Public Safety Licensees. *See, e.g.,* Mobile Relay Associates Comment re Consensus Proposal; United Telecom Council Reply Comment to Private Wireless Coalition Reply Comment, pp. 11-15 ("UTC and its members consider these issues too important to ignore in search of consensus, and urge the Commission to resolve, or to require thoughtful resolutions from the parties involved, before considering adoption of the compromise proposal."); *see generally* City of Baltimore Reply Comment; City of San Diego Reply Comment; Southern LINC Reply Comment.

[3] Amendment of part 90 of the Commission's Rules to Facilitate Development of SMR Systems in te 800 Frequency Band, PR Docket No. 93-144, *First Report and Order, Eighth Report and Order*, *and* Second Further Notice of Proposed Rulemaking, 11 FCC Rcd 1463 (1995) ("800 MHz Report and Order").

users with little or no showing that such dislocation would decrease intermodulation interference more than would the complementary measures suggested by the Private Wireless Coalition in its Comments.[4] Moreover, adoption of such proposal effectively would prove unduly burdensome to traditional SMR operators, many of whom were relocated from their licenses in the Upper 200 Channels within the past five years. According to several Comments, forced relocation with the attendant cost borne by the non-interfering traditional SMR operator would lead to bankruptcy or the forced sale of the business to Nextel or another interested party.[5] In addition, under the Consensus Proposal, Southern LINC, Preferred, and other non-Nextel General Category auction winners would, with little or no validation or rationale offered, be dispossessed of their respective EA market authorizations granted less than two years ago in a forced exchange with Nextel for channels within that company's General Category F and FF Frequency Block (Channels 121-150) EA Market or Lower 80 Economic Area Market authorizations, if space is available in a particular market, or channels within that company's 900 MHz licenses. Such loss of contiguous spectrum which provided Preferred and the other General Category EA market authorization holders the right to offer cellularized service allocated in an auction is legally questionable and at best represents poor public policy with respect to the Commission's conduct of spectrum auctions.

Interestingly, with respect to Nextel in EA markets in which it won three or fewer Frequency Block licenses, adoption of the Consensus Proposal effectively would convert Nextel's site-specific General Category licenses, most of which are non-contiguous and encumbered by the EA market authorization granted to the auction winner, into contiguous geographic market area licenses with considerably greater coverage in contravention of Section

[4] Private Wireless Coalition Comments, pp. 12-13.

309 (j) of the Communications Act of 1934, as amended, and the requirement for regulatory parity set forth in Section 6002 of the Omnibus Budget Reconciliation Act of 1993.

Finally, the so-called Consensus Plan seeks to award only Nextel 10 MHz of PCS spectrum in the 1.9 GHz band, apparently in exchange for its 700 MHz Guard Band Licenses (4 MHz of spectrum not eligible for cellularized service) in 43 Major Economic Area ("MEA") markets, 900 MHz licenses, and its promise to contribute up to $500 million toward defrayment of the cost of Public Safety relocation, to the exclusion of any other interested party. As discussed below, Preferred would be willing to exchange 900 MHz licenses and contribute up to $50 million toward the payment of Public Safety relocation costs in exchange for 10 MHz of spectrum in the 1.9 GHz Band in certain Economic Area markets. For the reasons set forth above, Preferred necessarily must oppose adoption of the Compromise Plan. Based upon the Commission's recent Public Notice that the FCC was interested in receiving comments on proposals other than the Compromise Proposal, Preferred has chosen both to comment upon the Re-Banding Proposal set forth in Motorola's Reply Comment and to propose its own comprehensive alternative.

II. 800 MHz Licensing Structure

In the NPRM the Commission provides a brief background of the 800 MHz Band Plan and specifically introduces the establishment of geographic area licensing and new service rules[6], However, Preferred has discovered little if any discussion in the NPRM or the comments or reply comments filed so far in this proceeding about these new service rules, the results of the 800 MHz SMR auctions, Nextel's EA licensing channel positions, or the rights and obligations of the

[5] *See, e.g.,* Skitronics, Inc. Comment.

EA licensees. Preferred's position is that the Consensus Proposal or any other proposal which seeks to re-band within 800 MHz Band through the establishment of separate Cellularized Service and Non-Cellularized Service Blocks must carefully consider the spectrum rights of the EA licensees. Preferred maintains that the identity of the parties entitled to spectrum within any such Cellularized Service Block or Blocks[7] already was determined by the Commission when it sold the spectrum development rights to SMR channels in 175 EA markets pursuant to these auctions (Nos. 16, 34 and 36) conducted during 1997-2000.

As pointed out by the Commission, these auctions were conducted to provide Nextel and other interested operators or new entrants contiguous so that they might offer advanced cellularized service.[8] Southern, Preferred and other companies besides Nextel have spent approximately $100 million to purchase these respective frequency blocks of contiguous spectrum in these auctions. The Consensus Proposal, which effectively strips from Preferred and these other companies the spectrum rights they acquired, is nothing less than a proposal by Nextel to reverse the results of these auctions and be granted monopoly status as a cellularized service provider within the 806-824/851-869Mhz band.

It should be noted that is not the first time Nextel has tried to acquire General Category EA licenses without paying for them. In the Second Report and Order, the FCC writes "AMTA, SMR WON, and Nextel offered a proposal ("Industry Proposal") for licensing the lower 230 channels through a pre-auction process that would allow incumbent to obtain rights to unlicensed spectrum through settlement agreements with one another. The parties submit that the Industry

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[6] NPRM at paragraph 9.
[7] *See* Motorola, Inc. ("Motorola") Reply Comment, pp. 9-14 (recommends two cellularized service blocks, one of which it characterizes as a Transition Block that would vary on a market-by-market basis depending upon the total spectrum held by Nextel, Southern LINC and other General Category EA licensees.
[8] Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800

Proposal represents a consensus of the SMR industry and takes into account the interest of wide-area licenses as well as site-by-site incumbents..."[9] The Commission responded to this Industry Proposal by saying, "...we decline to adopt this Industry Proposal in its entirety. The settlement concept would, in essence, allow incumbents to divide all remaining unlicensed spectrum on the lower 230 channels among themselves, with no opportunity for new entrants to obtain or even compete for such spectrum. As set forth below, this raises both statutory and policy concerns that prevent us from endorsing the proposal."[10] The Commission then concluded that "allowing only incumbent licensees to obtain the rights to an entire EA while foreclosing opportunities for new entrants would be at odds with our goals of promoting economic competition in the 800 MHz SMR service...the approach we adopt herein, unlike the Industry Proposal, would encourage participation of new entrants, including small businesses, and, therefore promote vigorous economic competition and avoid excessive concentration of licenses."[11] Furthermore, the Commission observed that the "Industry Proposal provides no method for the Commission to recover a portion of the value of public spectrum pursuant to section 309 (j) (3) (C) of the Communications Act. Instead, incumbent licensees who negotiate expansion rights among themselves could obtain a windfall by obtaining rights to an entire EA without having to pay for such expansion rights. We disagree with commenters who attempt to justify this potential windfall by arguing that the proposed settlement procedure complies with the directive in section 309 (j) (3) (E) for the commission to avoid mutual exclusivity through 'engineering solutions, negotiation, threshold qualifications, service regulations, and other means.' Section 309 (j) (6) (E) requires us to adopt such methods where we find them to be in the 'public best interest.' We

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MHz Band, *Second Report & Order* (released June 23, 1997), paragraph 2.
[9] *Id*. at paragraph 6.
[10] *Id*. at paragraph 60.

do not believe it is in the public interest to 'resolve' the competing claims of incumbents and non-incumbents for spectrum by establishing a settlement mechanism that is limited to incumbent and excluding non-incumbents from the process."[12]

Nextel claims running averages of 18.5 MHz the top 320 markets across the country. In determining the number of channels owned they use a combination and site-specific and EA licensees. However, owning a license in part of an EA does not mean you have the rights to the entire EA. The following is a list of the 800 MHz SMR auctions held and the percentage of EA licenses won by Nextel.

A. 800 MHz SMR "Upper 200" Auction; Auction 16: 95%

B. 800 MHz SMR " Lower 80 " Auction; Auction 34: 76%

C. 800 MHz SMR General Category Auction; Auction 36: 92%

The following shows the amount of money spent in each Auction.

A. 800 MHz SMR "Upper 200" Auction; Auction 16 : $96.3 M

B. 800 MHz SMR "Lower 80" Auction; Auction 34: 28.9 M

C. 800 MHz SMR General Category Auction; Auction 36: $$319.5 M

None of the proposals to re-band within the 800 SMR Band in this proceeding require the "Upper 200" 800 MHz SMR block or the "Nextel Block" as it is referred to (because Nextel owns virtually all of it, with the exception of the Puerto Rico EA market see below), to move. Simple math therefore reveals that it is the other 230 EA channels that need to be considered in determining which EA licenses should be allocated cellularized service spectrum.

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[11] *Id*. at paragraph 61.
[12] *Id*. at paragraph 62.

The Participants in General Category Auction, other than Nextel, spent a total of $87.9 million. It should be noted that the Consensus Proposal effectively creates a game of spectrum musical chairs in which the General Category EA Licensees other than Nextel are the last to sit down. Based upon the exchange in the Consensus Proposal between General Category EA channels and NPSPAC channels and the somewhat more diverse ownership of General Category EA licenses, Preferred would submit that they should be the first to find a seat.

III. Preferred Communication Systems, Inc. EA licensee Holdings

Preferred participated in the General Category Auction, spending $31.6 million. The following is a list of the EA licenses with corresponding number of channels and Pops Preferred won in this auction.

Channels	Market Name	Population
100	Washington-Baltimore, DC-MD-VA	7,454,633
100	Richmond-Petersburg, VA	1,247,627
150	Roanoke, VA-NC-WV	760,378
150	Staunton, VA-WV	301,626
75	Charleston, WV-KY-OH	1,196,043
75	Fresno, CA	1,168,970
75	Sacramento-Yolo, CA	1,935,487
25	San Francisco-Oakland-San Jose	8,033,134
75	Redding, CA-OR	307,572
125	Puerto Rico and the U.S. Virgin Island	3,623,846

General Category EA license is not simply a licensee that overlays site-specific general category incumbent licensee that covers the entire EA market. Generally, in each EA license there exists a considerable amount of white space (both in terms of vacant frequencies and geographical area not covered by the site-specific frequencies that are still held by incumbents). For illustration of this point, please refer to coverage maps in attachment A. The

reason for so these large footprints is two-fold. First, FCC placed a freeze on the acceptance of applications of new site-specific general category licenses in October 1995 in preparation for the 800 MHz SMR auctions. Second, the Commission aggressively sought to cancel thousands of general category site-specific licenses for untimely construction and a variety of technical reasons. As a result, prior to the conduct of Auction #34, the incumbents, such as Nextel, generally held relatively few general category site-specific licenses in a particular EA market and these licenses generally covered 50% or less of the population of such markets.

IV. Guiding Principles

Based upon the NPRM and a careful review of the comments and reply comments filed to date in this proceeding by all classes of licensees, Preferred has selected the following principles ("Guiding Principles") which it believes should be considered by the Commission in evaluating the Consensus Proposal, as well as the alternative proposals recommended by Motorola and Preferred in this Comment:

A. Minimize both Near-Term and Medium-Term Interference with Public Safety Users[13]

B. Minimize Relocation Disruption and Costs. [14]

C. Provide Adequate Funds for Public Safety Relocation and Retuning Necessitated by Proposal.[15]

D. Provide Additional Spectrum for Public Safety Users.[16]

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[13] NPRM at paragraph 2.

[14] *See* Reply Comment of ALLTEL Communications, Inc., Cingular Wireless LLC, AT&T Wireless Services, Inc., First Cellular, Coupe Communications, Inc., Nokia Inc., Southern LINC and Unites States Cellular Corporation ("ALLTEL Group"), pp. 4-5, n.17.

[15] *See* American Mobile Telecommunications Association ("AMTA") Comment, paragraph 16; AMTA Reply Comment, p. 4; City of Baltimore Reply Comment, p. 6; Motorola Reply Comment, p. 4; Public Safety Wireless Network Reply Comment, pp. 10-12, n. 43.

[16] *See* Motorola Reply Comment, pp. 2, 9, 17-18; Southern LINC Reply Comment, pp. 23-24, 90-95.

E. Minimize Disruption to 800 MHz License Structure.[17]

F. If 10 MHz of PCS Spectrum in 1.9 GHz Band Is Made Available, all Interested 700 MHz Guard Band and 800 MHz SMR Auction Participants Who Contribute 700 or 900 MHz Licenses and Funds to Defray Cost of Public Safety Relocation Should Be Eligible to Receive Such Spectrum.

V. Preferred Proposal

A. Premises

1. Nextel is Primary Cause of Interference Which Best Can Be Remedied on a Near-Term Basis By Certain Technical Solutions and Mitigation Tactics.

Preferred agrees with the vast majority of Comments and Reply Comments filed so far in this proceeding that Nextel is the primary source of interference with public safety users and other 800 MHz users.[18] Based upon a careful review of these Comments and Reply Comments, Preferred believes that such interference can best be remedied on a near-term basis by adherence to the Best Practices Guide,[19] and certain technical solutions and mitigation tactics recommended by several of the Comments and Reply Comments.[20] Preferred agrees with both the Private Wireless Coalition and Motorola that public safety and CMRS users should be encouraged to modify either system; use filters for CMRS transmissions; and segregate public

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[17] NPRM at paragraph 2.

[18] *See*, *e.g.,* ALLTEL Communications, Inc., Cingular Wireless LLC, AT&T Wireless Services, Inc., Coupe Communications, Inc., First Cellular, Southern LINC, Nokia Inc., and United States Cellular Corporation (•ALLTEL Group•) Reply Comment, pp. 3-5, n. 11-17; and Joint Reply Comments of Cingular Wireless LLC and ALLTEL Communications, Inc. (•Cingular & ALLTEL•), pp. 8-9, n. 28-36.

[19] *See, e.g.,* ALLTEL Group Reply Comment, p. 15; Motorola, Inc. Reply Comment, p. 19; Southern LINC Reply Comment, p. 7, n. 18-19; United Telecom Council Reply Comment, pp. 15-16, n. 16-17.

[20] *See, e.g.,* ALLTEL Group Reply Comment, p. 15; City of Baltimore Reply Comment, p. 7; City of Portland Reply Comment, pp. 2, 5-6; Motorola Reply Comment, p. 19; Private Wireless Coalition Comment, pp. 12-13; Small Business in Telecommunications Reply Comment, pp. 80-95; Southern LINC Reply Comment, pp. 4, 6, 8-10, n. 22-35; pp. 13-14, n. 48-50; UTC Reply Comment, pp. 21-24, n. 24-25; and UTC Reply Comment to Private Wireless Coalition Reply Comment, pp. 2-21.

safety and CMRS spectrum assignments.[21] Further, Preferred agrees that CMRS Licensees who seek to expand their systems can minimize the potential for interference through advanced planning using frequency coordination procedures; purchasing equipment with high intermodulation specifications; and designing public safety systems to produce higher signal strengths levels that reduce the impact of CMRS systems in the area.

2. Inadequate Demonstration in Record that Realignment of 800 MHz Band Into Separate Cellularized and Non-Cellularized Service Blocks Would Considerably Lessen Intermodulation Interference.

Preferred agrees with the vast majority of comments and reply Comments that little or no evidence exists that realignment of the 800 MHz Band into two separate Non-Cellularized and Cellularized Service blocks would considerably lessen interference with public safety and other 800 MHz users from Nextel, and possibly other CMRS providers.[22] According to these comments and reply comments, any realignment or rebanding proposal, including the one submitted by Preferred in this Comment, must be accompanied by equipment redesign, particularly of the front end of public safety receivers.[23] As pointed out by Cingular Wireless LLC and ALLTEL Communications, Inc. in its reply comment, otherwise any such proposal would require significant relocation with the 800 MHz Band at considerable expense to moving parties, in contravention of the Notice's stated goal of minimizing disruption to existing licensees and still would not minimize or solve interference to public safety and other 800 MHz Band

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[21] *Private Wireless Coalition Comment, pp. 12-13; Motorola Reply Comment, p. 19.*

[22] *See, e.g.,* ALLTEL Group Reply Comment, pp. 5-7, n. 18-26; p. 8, n. 27-30; Cingular & ALLTEL Reply Comment, pp. 4-5, n. 12-13; City of Baltimore, p. 4, n.6; City of Portland, p. 4; Southern LINC Reply Comment, pp. 12-13, n. 47-51; pp. 25-27, n. 97-106; p. 48, pp. 50-51, n. 184-88, p. 58, n. 214-216; UTC Reply Comment, pp. 18-19, n. 21-22; UTC Reply Comment to Private Wireless Coalition Reply Comment, p. 15.

[23] *Cingular & ALLTEL Reply Comment, p. 5, n. 13.*

users.[24]

3. Relocation of Public Safety Users to 700 MHz Band Best Long-Term Solution to Interference Problem.

Preferred agrees with the vast majority of comments and reply comments filed so far in this proceeding that relocation of Public Safety users to the 700 MHz Upper Band is the best long-term solution to the interference problem encountered by public safety and other 800 MHz users.[25] Unlike the Consensus Proposals realignment or rebanding plan or that submitted by Motorola in its Reply Comment, which lack any funding mechanism beyond Nextels promise to contribute up to $500 million, such relocation could be funded in part, or in whole, through the auction proceeds to be realized from allocating the spectrum to be vacated by public safety.[26]

4. If Realignment of 800 MHz Band Considered Necessary Medium-Tem Solution, such Realignment Should Minimize Disruption to Commission's License Structure.

Preferred agrees both with the Notice's Directive and numerous comments and reply comments that any 800 MHz rebanding proposal should be judged by whether it

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[24] *Id*.

[25] *See, e.g,,* ALLTEL Group Reply Comment, pp. 6-7, n. 23-26; pp. 15-18, n. 61-70; Cingular & ALLTEL Reply Comment, pp. 6-7, n. 16-23; Mobile Relay Comment to Consensus Proposal, pp. 3-8; SBT Reply Comment, pp. 28-31; and Southern LINC Reply Comment, p. 4, n. 7-9, pp. 14-19, n. 52-74 and pp. 21-22, n. 82-89.

[26] *See* American Mobile Telecommunications Association (•AMTA•) Comment, paragraph 16; AMTA Reply Comment, pp. 9-10; City of Baltimore, pp. 6; Public Safety Wireless Network Reply Comment, pp. 10-12, n.43 (•[FCC] should not impose the reorganization plan until external funding has been identified and guaranteed to compensate all public safety entities for any relocation costs from this initiative.•); Southern

minimizes disruption to the Commission's 800 MHz Band license structure.[27] As noted above, the Consensus Proposal seeks not only to eliminate the right of Non-Nextel General Category EA Market licensees to offer cellularized service but in several EA Markets also would force such licensees to relocate a considerable number of their channels to clearly inferior 900 MHz Band noncontiguous spectrum. In some markets, such as Puerto Rico, even that spectrum would be unavailable to Preferred.

B. Operation of Proposal.

1. Near-Term: Complimentary Measures.

Preferred agrees with several reply comments, including those of the Private Wireless Coalition, Motorola and Small Business in Telecommunications and the United Telecom Council, as well as numerous public safety organizations that in the near-term the best solution to interference with public safety and other 800 MHz users would be to undertake the following:

a. Codify or strongly encourage 800 MHz users to follow the Best Practices Guide;
b. Strengthen Section 90.173 of the Commission's technical rules to absolutely require the party causing interference to correct it and pay for the remedial measures;[28]
c. Adoption of the following technical solutions:
    (1) Require Nextel and other cellularized service operators to install cavity-based combiners in cases where interference occurs;[29] and
    (2) Development of band-pass filters by mobile and handheld

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LINC Reply Comment, p. 20, n. 80;

[27] *NPRM* at paragraph 2; *see* Southern LINC Reply Comment, pp. 28-29, 30, 31, 46-47, n. 162-164; pp. 53-54, n. 194-195; 196-198.

[28] *See* UTC Reply Comment, p. 15.

[29] *Id.* at p. 19.

antenna manufacturers;[30]

(3) Adoption of Adjacent Channel Coupling Protocol ("ACCP") to replace the current "emission mask" in governing equipment to be used in the 800 MHz Band;[31]

(4) Extend more stringent out-of-band emissions ("OOBE") attenuation requirements to 800 MHz systems;[32]

(5) Adopt the Best Practices Guide recommendation to require that user receiver equipment provide a minimum of 75dB intermodulation specification;[33]

d. Codify the following Mitigation Tactics:

(1) Modifications for either system, including channel swaps by eliminating eligibility restrictions in Part 90 for the various pools -- Business, Industrial Land Transportation, SMR and Public Safety for this limited purpose;[34]

(2) Consolidate the Business and Industrial Land Transportation Category service pools;[35]

e. Encourage the following Mitigation Tactics:

(1) Segregation of public safety and CMRS spectrum assignments;[36]

(2) In the case of licensees seeking to expand their systems:

(a) Minimize the potential for interference through advanced planning using frequency coordination procedures;

(b) Purchase of equipment with high intermodulation specifications; and

(d) Design of public safety radios to produce higher strength levels that reduce the impact of CMRS systems in the area.[37]

2. Medium-Term: Re-Banding.

To minimize the disruption with the Commission's "existing license

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[30] *Id. at pp. 20-21. UTC suggests that these filters could be frequency-segment-specific and add additional rejection to signals coming from devices operating in the 800 MHz Upper 200 Channels (861-866 MHz) Band.*

[31] *UTC Reply Comment to Private Wireless Coalition Reply Comment, p.18.*

[32] *Id*.

[33] *Id*. at p. 19.

[34] *See Private Wireless Coalition Comment, pp. 12-13; Motorola Reply Comment, p. 19; UTC Reply Comment, pp. 21-24, n. 24-26.*

[35] *UTC Reply Comment, pp. 24-25, n. 26.*

[36] *See Private Wireless Coalition Comment, pp. 12-13; Motorola Reply Comment, p. 19.*

[37] *Id*.

structure" as set forth in the Notice's Directive[38] and to provide needed clarity to the rebanding proposal set forth by Motorola in its Reply Comment, Preferred has crafted an alternative proposal that it believes best comports with the Commission's stated goals and objectives in this proceeding. Preferred's alternative proposal, like the one advocated by Motorola in its Reply Comment, seeks to satisfy both objectives set forth by the Notice's Directive: remedy interference to public safety systems consistent with (1) minimum disruption to the Commission's licensing structure and (2) assurance of sufficient spectrum for critical public safety communications.

Unlike the Consensus Proposal, Preferred's alternative, like the proposal recommended by Motorola, recognizes that in many 800 MHz General Category EA Markets, non-Nextel licensees hold so many EA Market frequency block licenses and, in some Markets, 800 MHz General Category site-specific and Lower 80 EA market or site-specific licenses automatic grant to Nextel of the NPSPAC frequencies (Channels 601-720) is not only legally questionable but mathematically unworkable. In the Puerto Rico EA Market, for example, Nextel holds one of the six General Category EA Market frequency blocks (a considerable number of these channels are encumbered by General Category site-specific licenses held primarily by Preferred), 60 unencumbered Lower 80 EA Market channels and no Business or Industrial Land Transportation channels. Adoption of the Consensus Proposal would leave Preferred with approximately 65-70 channels without a space in the 800 MHz Band in this EA Market. Under the Consensus Proposal, Preferred's General Category EA Market licenses and even its General Category site-specific licenses in the sole General Category EA Market frequency won by Nextel in FCC Auction #34, would be forced to relocate in 900 MHz Band

[38] *NPRM* at paragraph 2.

spectrum held by Nextel. Preferred could provide, and if asked, will provide several additional examples of the mathematical difficulty encountered by the Consensus Proposal in EA Markets where non-Nextel entities won three or more General Category frequency block licenses.[39]

To remedy this somewhat obvious flaw in the Compromise Proposal, Preferred's Alternative Proposal described in detail below initially would create a Cellularized Service Frequency Block in the 816-824/861-869 MHz Band and a Non-Cellularized Service Frequency Block in the 806-812/851-857 MHz Band (Channels 1-280). The intervening spectrum or 812-814/857-859 MHz Band (Channels 281-370) would be, as Motorola described, a Transition Band, in which low-site and low power cellular architecture systems would be permitted.

Like the Motorola Proposal discussed below, the Preferred Alternative Proposal recommends that operators such as Southern LINC, which has both high-site and high-power and low-site and low-power operations, be required to be located at the top of this Band (Channels 330-370), which would vary somewhat depending on the particular market) and not interleaved with high-site operations.[40] As noted by Motorola, since this Band will be a mix of Business, Industrial Land Transportation and SMR Licenses, a number of systems cannot be classified easily into either the high-site or low-site category. Preferred therefore, recommends that the Commission provide frequency coordinators with the flexibility to implement systems throughout this Block.

Like Motorola's Proposal, Preferred's Alternative Proposal takes into account the use by Southern LINC, and perhaps other operators, of unity combiners, which

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[39] This problem, among others, with the Consensus Proposal has been recognized by several of the comments and reply comments filed including, but not limited to those AMTA (private Wireless Coalition Reply Comment), Mobile Relay Associates (Consensus Proposal), Southern LINC and UTC (Private Wireless Coalition Reply Comment).

cannot be refined to operate on contiguous channels. Their users will need to interleave their assigned channels across a band of frequencies in both the Transition Band (812-815/857-860 MHz Band or Channels 281-370) and cellularized Service Band (821-824/866-869 MHz Band or Channels 601-720). As noted by Motorola, such approach will minimize frequency rearrangement costs and preserve coverage performance for incumbent operators. Such approach maximizes protection against interference by separating high-site and low-site systems while allowing use of existing equipment to the greatest extent possible and providing flexibility for deployment of "mixed" site systems.

Unlike both the Consensus and Motorola Proposals, the Preferred Alternative Proposal separates 150-190 channels allocated to public safety into a contiguous band (Channels 1-150) and thereby maximizes interference protection from intermodulation interference caused by low-site and low-power operations in the newly wanted Transition and Cellular Service Bands.[41] Under Preferred's Alternative Proposal, Public Safety would retain its allocated channels in the so-called "Interleave" at channels 209-211, 218-220, 229-231, 238-240, 249-251, 258-260, 269-271, 279-281, 289-291, and 298-300.

Unfortunately, like the Motorola Proposal, to comply with the Notice's goal of minimizing disruption to the Commission's present license structure, Preferred's Alternative Proposal regrettably does not provide for additional 800 MHz spectrum for public safety or 800 MHz spectrum for auction to CMRS carriers. The Consensus Proposal also does not provide the additional public safety spectrum. Rather, it reserves such spectrum for public safety for a five year period, during which any defaulted channels within the overlay new EA Licenses may be acquired only by a public safety licensee.

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[40] Motorola Reply Comments, P.12.

However, unlike the Consensus Proposal, the Preferred Alternative Proposal agrees with Motorola and the vast majority of public safety and other comments and reply comments that the Commission should reallocate up to 30 MHz of spectrum in the 700 MHz Capital Upper Band to public safety and compatible Department of Defense and Homeland Security operations.[42] As pointed out by Motorola, this relocation would increase the spectrum allocable to public safety by 20.5 MHz and also provide the foundation for interoperable across local, state and federal government departments so multiple utilities can communication with one another when the need arises.[43]

The Preferred Alternative Plan, like the Consensus and Motorola Proposals would be implemented in a series of steps set forth immediately below:

a. Step 1: Public Safety Licensees in the 806-809/851-854 MHz Band (Channels 1-120) and 814-816/859-861 MHz Band (Channels 371-400) Would Swap on a 1-1 Basis with a Nextel channel in the 809-814/854-859 MHz Band (Channels 151- 348);
b. Step 2: Non-Nextel site-licensed Business and Industrial Land Transportation and SMR licensees in the 806-809/851-854 MHz Band (Channels 1-120) would relocate on a 1-1 basis, with the assurance of spectrum neutrality, that is, in the words of the Compromise Proposal, "they would lose neither channels or capacity in the process" to Nextel channels in the 809-814/854-859 MHz Band (Channels 201-370);
c. Step 3: General Category EA Market licensees (including Nextel) would exchange on a channel-for channel basis with NPSPAC licensees on a system-by-system basis, or by NPSPAC Region;
d. Step 4: Public Safety Licenses in Channels 309-311, 318-320, 329-331, 338-340, 349-351, 358-360, 369-371, 378-380, 389-391 and 398-400 would relocate to Channels 121-150 vacated by the General Category EA Market licensees;
e. Non-Nextel site-licensed Business and Industrial Land Transportation licensees in channels 372-377 and 392-397 would be reallocated channels 358-370;

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[41] Public Safety Window Network Reply Comment, pp.2-3, n. 8.
[42] Motorola Reply Comment, pp. 9, 17-18; See also ALLTEL Group Reply Comment, pp. 6-7, n.23-26; pp. 15-18, n. 61-70; Cingular & ALLTEL Reply Comment, pp. 6-7, n. 16-23; SBT Reply Comment, pp. 28-31; Southern LINC Reply Comment, p. 4, n. 7-9, pp. 14-19, n. 52-74; and 21-22, n.82-89.
[43] Motorola Reply Comment, p. 16, n. 21.

f. Step 5: General Category EA Market licensees (including Nextel) would be allocated Channels 371-400 which would be eligible for cellularized service; and
g. Step 6: Nextel would exchange its Lower 80 EA Market and site-specific licenses, its 700 MHz Guard Band and its 900 MHz licenses and contribute up to $500 million to defray the cost of public safety relocation for 10 MHz of PCS spectrum in the 1.9 GHz Band; Preferred, and any other interested 700 MHz Guard Band or 800 MHz SMR auction participant also would be afforded the opportunity to exchange 700 and/or 900 MHz licenses and contribute funds toward the cost of public safety relocation. Preferred presently is acquiring 900 MHz Major Trading Area ("MTA") and site-specific licenses in certain markets to exchange for 10 MHz of PCS spectrum in the 1.9 MHz Band in certain markets and to contribute up to $50 million to defray the cost of public safety relocation.

3. Long-Term: Relocate Public Safety to 700 MHz Upper Band.

Although the Private Wireless Coalition in its comment recognized that relocation of public safety licenses in the 800 MHz Band to the 700 MHz Upper Band was the Optimum solution to the interference problem, the Consensus Proposal contains no mention of such relocation or any other long-term solution to the interference experienced by public safety or its need for additional spectrum to provide high-speed mobile data and interoperability among disparate local, state and federal government agencies.

As noted above, Preferred's Alternative Plan would provide for a reallocation of 30 MHz of spectrum in the 700 MHz Upper Band (749-764/779-794 MHz Band) to public safety, a net increase of 20.5 MHz over the present allocation of 9.5 MHz in their 800 MHz Band. Furthermore, Preferred's Alternative Plan provides for a funding mechanism to defray the cost of such relocation auction of the 150 contiguous channels (806-809/851-854 MHz Band or Channels 1-150) and remaining 40 Channels in the interleave) (809-814/854-859 MHz Band) to be vacated by public safety, the proceeds of such auction should be used solely to

pay public safety relocation costs.

Since Preferred's Alternative Proposal reallocates public safety to a 150 – contiguous channel block and leaves the remaining 40 public safety channels in place at the lower end of the 809-814/854-859 MHz Band, Arguable auction of these vacated channels would generate considerable interest and somewhat greater proceeds to defray public safety relocation costs then with the Motorola Proposal (120 –contiguous block with remaining public safety spectrum dispersed in the 809-814/854-859 MHz Band.)[44]

C. Application of Guiding Principles

1. Minimize Both Near Term Interference and Medium-Term Interference with Public Safety

Preferred's Alternative Proposal seeks to address the Notice's Directive by suggesting a variety of technical solutions and mitigation tactics , as discussed above, some of which should be codified and enforced if necessary, by the Commission. Furthermore, this Alternative Proposal suggests a relocating of 150 of Public Safety's channels in a contiguous band in the former general category pool thereby creating somewhat more spectrum of these channels from cellularization Service Blocks814-815/850-860 MHZ Band or (Channels 330-370;) and 821-824/866-869 MHz Band (Channels 601-602)

2. Minimize Relocation Disruption and Cost.

[44] For discussion of the relative market value of contiguous and non-contiguous 800 MHz SMR spectrum (806-824/851-859 MHz Band), see William G. Crawford and Darren P. Aftahi, analysts at U.S. Bancorp Poper Jaffray, Industry Note March 13, 2002, p. 4; Company Note, " A Favorable FCC Ruling would boost Nextel's Spectrum Value, But Investors are fixed on debt issues and concerns with Nextel International (contiguous spectrum valued at 41.18 per MHz/Pop; non-contiguous spectrum valued at 41.50 per MHz/Pop). Thomas J. Lee analyst at J.P. Morgan Securities, Inc., Company report Nextel Communications - - Reach Out and Push (To Talk To) Someone August, 2001, pp. 23-24 (Contiguous spectrum valued at 4.02 per MHz/Pop; non-contiguous spectrum valuation unclear,

Preferred's Alternative Proposal seeks to minimize the extent of movement within the 800 MHz Band and, like the Motorola Proposal, to provide a solution so that no present 800 MHz Band Licensee is forced to relocate to the less desirable 900 MHz Band. As several of the comments and reply comments point out, relocation to the 900 MHz involves even greater costs than does movement within the 800 MHz Band.

3. Provide Additional Funds for Public Safety relocation and Retuning Necessitated by Proposal.

Preferred's Alternative Proposal provides for Public Safety relocation and retuning access by its proposal in several ways. First, as under the Compromise Proposal, Nextel would contribute up to $500 million to defray some of this cost as part of it's exchange of lower 80 EA Market and site-specific licenses, 700 MHz Guard Band and 900 MHz Licenses in exchange for 10 MHz of PCS spectrum in the 1.9 GHz Band in most EA markets.

Second, Preferred, and any other interested 700 MHz Guard and 800 MHz SMR auction winner would be eligible to receive such PCS spectrum in certain markets in exchange for their contribution of 70 or 900 MHz licenses and funds to further defray the cost of Public Safety relocation and retuning. Preferred, for example, presently is acquiring 900 MHz licenses in certain EA markets which it proposes to exchange, along with a contribution of up to $50 million toward the payment of Public Safety relocation and retuning costs, for 10 MHz of PCS spectrum in the EA markets in which it holds general category EA markets authorizations and certain other EA markets.

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since no cellular or PCS buyer would be interested).

Finally, under Preferred's Alternative Plan, funding the relocation of Public Safety to the 700 MHz Band would be provided through the auction of 150 contiguous channel blocks in the 806-809/851-854 MHz Band and 40 additional channels in the 809-814/854-859 vacated by Public Safety.

4. Provide Additional Spectrum for Public Safety Users.

As discussed above, within the consensus Proposal, Motorola's Proposal or Preferred's Alternative Proposal provides additional spectrum for Public Safety in the crowded 800 MHz Band. However, both Motorola's and Preferred's Alternative Proposal supports the reallocation of 30 MHz of spectrum in the 700 MHz upper Band for Public Safety and Defense and Homeland Security. Such reallocation would represent a net increase of 20.5 MHz f spectrum for Public Safety over what it is presently allocated in the 800 MHz Band.

5. Minimize Disruption to License Structure Within 800 MHz Band.

Preferred's Alternative Proposal, like that of Motorola, seeks to "keep all existing 8000 MHz operators and licenses 'whole' in terms of present frequency assignments" and maintains the spectrum rights afforded to the present EA Market licenses by virtue of winning such rights in one or more of the SMR auction conducted by the Commission during 1997-2000. Under both Motorola's Proposal and Preferred's Alternative Proposal, no 800 MHz licensee would be forced to relocate outside that Band.

6. If 10 MHZ of PCS Spectrum is Made Available, All Interested 700 MHz Band and 800 MHz SMR Auction Winners Who Contribute 700 MHz Guard Band or 900 MHz Licenses and Promise to Pay Portions of Public Safety Relocation Cost Should Be Eligible to Participate to Receive Such Spectrum.

As noted above, Under Preferred's Alternative Proposal, Nextel and any other similarly situated 700 MHz Guard Band or 800 MHz SMR auction winner who contributed 700 MHz Guard Band or 900 MHz licenses an funds for relocation would be eligible to receive in exchange therefore 10 MHz of PCS spectrum in the 1.9 GHz Band in certain EA markets.

VI. Comments on Consensus Proposal

A. Premises

1. Intermodulation Interference Is the Type of Interference Most Frequently Experienced by Public Safety Users; Re-banding of 800 MHz Band into Two Separate Blocks; (1) Cellular Service Blocks (816-824/861-869 MHz) and (2) Non-Cellularized Service Blocks substantially would reduce Such Interference.

The basic premise of the Consensus Proposal is that intermodulation interference is the most frequently encountered type of interference by public safety systems.[45] According to this Proposal, the movement of NSPAC licenses and the separation of the 800 MHz Band into two separate Bands: Cellularized Service (1) (816-824/861-869

MHz) and (2) Non-Cellularized Service (806-816/851-861MHZ Band) would relieve a substantial portion of the intermodulation interference experienced, or expected to be experienced in the future. As noted above, the vast majority of comments and reply comments disagree with this basic premise.[46]

2. Nextel Alone Must Be Made Whole

According to the Consensus Proposal only Nextel must be "made whole" for vacating its General Category EA and site-specific licenses, Lower 80 EA and site-specific licenses, 700 MHz guard band licenses, 900 MHz SMR licenses, and contributing up to $500 million to defray Public Safety costs relocating Public Safety, by receiving 6 MHz of contiguous spectrum in the 821-824/866-869 MHz Band and 10 MHz of PCS spectrum in the 1.9 GHz Band. Such exchanges apparently would not take into account the results of the 800 MHz General Category and Lower 80 Auctions.[47]*

B. Operation:

1. Near-Term; Complementary Measures

The Consensus Proposal is largely silent as to what near-term actions should be undertaken to minimize CMRS interference with Public Safety. It also suggests

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[45] See Nextel Communications, Inc. ("Nextel") Reply Comment, p. 20.

[46] See, e.g., ALLTEL Group Reply Comment, pp. 5-7, n. 18-26; p. 8, n. 27-30; City of Portland Reply Comment, p.4; Southern LINC Reply Comment, pp. 12-13, n. 47-51; pp. 25-27, n. 97-106; pp. 48, 51-52, n. 184-188; UTC Reply Comment, pp. 18-19, n. 21-22; UTC Reply Comment to Private Wireless Coalition Reply Comment, p. 15.

[47] *But see* Consensus Proposal, p. 11, n. 42 in which it states that "[l]icensees currently operating in the non-cellularized block using a cellular, low-site architecture may move up to the cellularized block in exchange for their existing authorizations.." In n 42 the Consensus Proposal indicates that " modifications to such Proposal may be appropriate within specific geographical areas in which both Nextel and Southern Company have low-site CMRS systems." However, Nextel apparently disagrees. According to its Reply Comment at 11 and p. 21 only it would uld receive the licenses for spectrum in the 821-824/866-869 MHz Band.

that the Commission should consider codifying, and perhaps revision of the *Best Practices Guide*.[48] The Proposal also notes that interference resolution procedures and careful planning will be necessary regardless of the relocation due to lengthy transition period and potential for interference after re-banding is completed.

2. Medium-Term: Rebanding

The Consensus Proposal, like Preferred's Alternative Proposal discussed above, seeks to separate the 800 MHz Band into two separate contiguous blocks. Under this Proposal, the first such block is for Cellularized Service (low-site and low-power) and is comprised of 6 MHz of spectrum in the 821-824/866-869 MHz Band presently allocated to NSPAC. Unlike Preferred's Alternative Proposal and Motorola's Proposal, Nextel would be allocated this spectrum in every EA Market regardless of the results of the General Category and Lower 80 Auctions. The second block would be limited to Non-Cellularized Service. Systems with all of the following characteristics would be prohibited in this Band: (1) more than 5 overlapping, interactive sites featuring hand-off capability; (2) sites with antenna heights of less than 100 feet above ground level on HAATs of less than 500 feet; and (3) sites with more than 20 paired frequencies.[49]

The Consensus Proposal accomplishes its re-banding through a series of steps similar to those set forth with respect to Preferred's Alternative Proposal. However, in this version of re-banding, Non-Nextel General Category EA licensees would exchange their contiguous spectrum and rights to offer cellularized service in competition with Nextel and cellular and PCS operators for Nextel's Lower 80 EA market licenses and General Category

[48] *Id*. at 23.

EA F and FF frequency block licenses (Channels 125-150, if available). Only after this intervening transfer is accomplished would Nextel, as then the exclusive holder of unencumbered General Category EA market licenses throughout the U.S., exchange such spectrum with NPSPAC licensees on a system-by-system basis, or by NPSPAC Region.

However, as both the Consensus Proposal and Nextel Reply Comment disclose, NPSPAC licenses will not be relocated unless and until third-party funding sufficient to cover these costs is made available. If such funding is not forthcoming, Nextel has discretion whether to provide additional funding or simply retain the General Category spectrum comprising 120 contiguous channels (806-809/851-854 MHz Band).[50]

C. Application of Guiding Principles

1. **Minimize Both Near Term and Medium-Term Interference with Public Safety:**

   Does Little More Than Suggest FCC Codifying Best Practices Guide.

2. **Minimizing Relocation disruption and Cost:**

3. **Provide Adequate Funds for Public Safety relocation and retuning Necessities by Proposal:**

   Beyond Nextel's $500 million commitment, no funding mechanism.

4. **Provide Additional Spectrum for Public Safety:**

   700 MHz Guard Band encumbered by UHF broadcasters.

5. **Minimize Disruption to Licensing Structure:**

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[49] Consensus Proposal, p. 10, n. 41.
[50] Consensus Proposal, p. 20; *see* Nextel Reply Comment, pp. 31-31 for conditions precedent to the distribution of more than $50 million of the $500 million promised by Nextel to defray the cost of public safety relocation.

Seeks to more disruption to the current licensing structure than is necessary to simply to remove the results of the 800 MHz Auction by striping General Category Auction by stripping non-Nextel winners of contiguous spectrum and rights to provide cellularized service and, in certain EA markets, forcing to relocate to the 900 MHz Band.

6. If 10 Mhz of PCS spectrum To Be Made Available, All Interested 700MHz Guard Band and 800 MHz Winners Who Contribute 700 MHz Guard Band or 900 MHz Licenses and Promise Funds to Pay Portion of Public Safety Relocation Costa Should Be Eligible to Receive Such Spectrum.

Under the Consensus Proposal and Nextel's Reply Comments, it seeks all CMRS operators to bear the cost of defraying public safety relocation. However, only Nextel apparently is entitled to benefit of receiving spectrum valued by several investment banking firm analyst at approximately $5 Billion.

VII. Conclusion

Preferred respectfully request the Commission to take the rights of all affected parties into consideration while examining the various proposals put forth in this proceeding.

Respectfully submitted,

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